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# *Southern Forestry Notes*

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*Southern Forest Experiment Station, New Orleans, La.*

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## EAST OKLAHOMA SURVEY COMPLETED

East Oklahoma has 5,632,000 acres of commercial forest land that support 4 billion board feet of sawtimber, according to a survey completed in 1956. The sawtimber is equally divided between pine and hardwood. Virtually all of the softwood is shortleaf pine. Oak and hickory make up the bulk of the hardwood.

The 17 counties included in the survey comprise the commercial timber belt in the eastern part of the State. Five of the counties, situated in the Ouachita Mountain region, were initially inventoried in 1936.

The acreage of forest land in the Ouachita region is nearly the same today as 20 years ago. The total volume of hardwoods and the sawtimber volume of softwoods have also remained virtually unchanged. But cubic volume of softwoods has increased by about 15%. This gain is largely attributable to good management on industrial and public holdings.

Full details on the east Oklahoma survey will be found in Southern Forest Survey Release 79.--  
H. S. Sternitzke.

RKF cws

## BULLDOZING TO CONTROL HARDWOOD BRUSH

Bulldozing clean, to mineral soil, resulted in the least site reoccupation by hardwood brush in a test made in south Arkansas.

Six treatments were applied to areas covered solidly by low, very dense, understory thickets:

- (a) Bulldozing clean, down to mineral soil, to clear off the plant cover completely.
- (b) Ground-line bulldozing with the object of knocking down, uprooting, and mutilating the brush by a continuous forward motion of the tractor. The torn-up vegetation was left where it fell.
- (c) Ground-line bulldozing as in (b) followed by spraying the area with a 1% aqueous mixture of 2, 4, 5-T.
- (d) Ground-line bulldozing as in (b) followed by burning.
- (e) Severing the stems at ground level with a cutting blade mounted on a tractor, leaving the brush where it fell.
- (f) Brush cutting as in (e) followed immediately by disking to cut and expose roots.

Three years after treatment, and at a time when the vegetation was in full leaf, the plots were examined to determine what proportions of the areas were actually overtopped by hardwood sprouts. No more than 24% of the area bulldozed clean had been reoccupied by hardwoods. The tallest stems on these plots averaged 4 feet high.

On plots bulldozed at groundline and then burned, 31% of the area was occupied by hardwoods; the average height of the tallest sprouts was 4 feet. On the other 4 treatments, hardwood reoccupation

ranged from 48% to 58% and the tallest sprouts averaged 4.6 feet to 6.4 feet. -- Charles X Grano.

## PINE OUTGROWS SWEETGUM IN UPLANDS

On a dry upland site in south Mississippi, loblolly pines of pulpwood size were found to be growing half again as fast in volume as sweetgums of comparable age and stocking.

The pines averaged nearly 28 years old, the sweetgums nearly 29. Stocking was close to 315 trees per acre for both species. Basal areas were 116 square feet per acre for pine and 100 for sweetgum. Mean annual growth of wood in trees larger than 4.55 inches d.b.h. to a 3-inch top (inside bark) was 85.3 cubic feet for pine and 54.2 cubic feet for sweetgum. This means that yield at age 30 years would be 2,560 cubic feet for pine, and 1,626 for sweetgum. Of course foresters may often find it preferable to carry along existing stands of upland sweetgum than to make a costly conversion to pine. It should be recognized, however, that sweetgum on dry sites cannot produce the volume or quality that it can in the bottoms. -- Wm. R. Beaufait.

## RECENT PUBLICATIONS

- \*Bruce, D., and Nelson, R.M. Use and effects of fire in southern forests: abstracts of publications.... Fire Control Notes, April 1957, pp. 67-96.
- \*Grosenbaugh, L. R., and Stover, W. S. Point-sampling compared with plot-sampling in southeast Texas. Forest Science, March 1957, pp. 2-14.

- \*Smith, R. H., and Lee, R. E. Black turpentine beetle. USDA Forest Pest Leaflet 12, 7 pp.
- \*Southern Station. Forests of east Oklahoma, 1955-56. Forest Survey Release 79, 34 pp.
- \*Williston, H. L., and Huckenpahler, B. J. Hardwood underplanting in north Mississippi. Journal of Forestry, April 1957, pp. 287-290.

In Proceedings, 1956 meeting of Society of American Foresters:

- \*Burke, H. D., and Blair, R. M. Game as a product of intensively managed forests. Pp. 190-191.
- \*Cassady, J. T., and Whitaker, L. B. Supplemental feeding... of beef cattle on forest range in Louisiana. Pp. 52-54.
- \*Ferguson, E. R. Causes of first-year mortality of... pines in east Texas. Pp. 89-92.
- Guttenberg, Sam. Stumpage price reports as a stimulus to timber growing. Pp. 132-133.
- \*McKnight, J. S., and McWilliams, J. S. Improving southern hardwood stands.... Pp. 71-72.
- \*Maisenhelder, L. C., and Heavrin, C. A. Silvics and silviculture of the pioneer hardwoods--cottonwood and willow. Pp. 73-75.
- \*Nelson, T. C., and Beaufait, W. R. Studies in site evaluation for southern hardwoods. Pp. 67-70.
- \*Putnam, J. A. Opportunities and problems in the silviculture of southern hardwoods. Pp. 62-64.
- Reynolds, R. R. Intensive timber management can be profitable in the South. Pp. 119-121.
- \*Toole, E. R., and Morris, R. C. Insect and disease problems in southern hardwood forests. Pp. 65-67.

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\*Copies are available at the Southern Station.